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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,420	07/09/2004	Kun-Cheng Wu	12978-US-PA	4419
31561	7590	06/05/2006	EXAMINER	
JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE			MEMULA, SURESH	
7 FLOOR-1, NO. 100			ART UNIT	
ROOSEVELT ROAD, SECTION 2			PAPER NUMBER	
TAIPEI, 100			2825	
TAIWAN			DATE MAILED: 06/05/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/710,420	WU ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Suresh Memula	2825

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 10 May 2006.  
 2a) This action is FINAL.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-5 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-5 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 07/09/2004 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

This FINAL office action is a response to the amendment + remarks filed on 05/10/2006. The remarks are not persuasive; therefore, the rejections based on the prior art of record Rich et al. are maintained.

### ***Specification***

The disclosure is objected to because it does not clearly describe the feature "impossible to be used" of "state dependent descriptions. See 37 CFR 1.75(d).

### ***Claim Objections***

Claim 1 is objected to because "impossible to be used" is not clearly described in the specification.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Rich et al. (US Pub. No. 2003/0125917).

Art Unit: 2825

As to Claim 1,

reading a cell description from an SDF file (Paragraphs 0007, 0043, and FIG. 1-6);

determining whether or not a state-dependent description is present in the cell description (Paragraphs 0008, 0043, and FIG. 2, 4-6, 10, and 14); and

removing the state-dependent descriptions in the cell description, which are impossible to be used, by referring to a state data contained in a design description and associated to the cell description when it is determined that the state-dependent description is present in the cell description (Paragraphs 0035, 0036, 0037, 0043, 0093, 0100 and FIG. 1-2, 4-6, and 22, insofar as the limitation "impossible to be used" is understood).

As to Claim 2, the state-dependent description is not present in the cell description, the cell description is kept unchanged in the SDF file (Paragraph 0099, and FIG. 6).

As to Claim 3, the state-dependent description is present in the cell description and there is no delay data description associated to the state, which is impossible to be used, the cell description is kept unchanged in the SDF file (Paragraph 0099, and FIG. 6).

As to Claim 4, the design description is a netlist (Paragraphs 0042, 0045, and FIG. 3-5).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rich et al. (US Pub. No. 2003/0125917) in view of Rupp et al. (US Pat. No. 6,857,110).

Rich teaches substantially all of the limitations as stated above, including the use of SDF IEEE 1076.4 (Paragraph 0043), but does not disclose the SDF IEEE 1497 in Claim 5.

Rupp discloses the SDF IEEE 1497 (Column 16, lines 3-4).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the SDF IEEE 1497 file as taught by Rupp, since it is a standard as specified by IEEE.

***Response to Applicant Remarks***

The applicant states that Rich does not teach:

- A. state-dependent descriptions, and
- B. reducing SDF file size by removing state-dependent descriptions which are impossible to be used.

Here are the examiner answers:

First, Paragraph 0007 in the instant application (US Pub No. 2005/0177806) states: "the delay data of each I/O path contains four state-dependent descriptions", which corresponds to one or more of "delay entries", "delay values", and "delay data" in Rich (Paragraphs 0035, 0037, 0054, 0100, and FIG. 6-7, 13, and 15).

Secondly, in accordance with the above, the SDF file size is reduced by removing state-dependent descriptions (Rich, FIG. 6). Note that although the exact phraseology "which are impossible to be used" is not recited in Rich, one or more of the following corresponds to the "impossible to be used" limitation in Claim 1:

- A. To avoid a "size penalty" (Paragraph 0088)
- B. Duplicated delay is impossible to be used, i.e., redundancy
- C. "...to complete a simulation in a timely manner" (Paragraph 0009)

D. "...the SDF analysis file, allows for certain portions of the SDF to remain untouched, for robustness" (Paragraph 0099); i.e., why remove portions that could possibly be used or are essential.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suresh Memula whose telephone number is (571) 272-8046. The examiner can normally be reached on M-F 8am-4:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Chiang can be reached on (571) 272-7483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SM 05/18/2006

PAUL DINH  
PRIMARY EXAMINER

